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AN  
ANSWER  
TO  
MR. GOLDSON;  
PROVING THAT  
VACCINATION  
IS A  
PERMANENT SECURITY  
AGAINST THE  
SMALL-POX.

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By JOHN RING,  
Member of the Royal College of Surgeons in London.

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—Scopuli nequidquam et spumea circum  
Saxa fremunt, laterique inlisa refunditur alga.

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# INTRODUCTION.

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It is well known, that Vaccine Inoculation has been unpopular at Portsmouth, and not much cultivated there. When, therefore, we hear that a much greater number of failures have occurred in this neighbourhood, than in other places where ten or twenty times the number are vaccinated, we are naturally inclined to suspect, that the fault is in the practitioners, and not in the practice.

If Mr. Goldson really wished for a fair investigation of the merits of the practice, it is rather unfortunate that he prejudices the question. Instead of saying, "cases of small-pox subsequent to vaccination," it would have been more candid to have said, "supposed cases of small-pox after vaccination;" or, "cases of small-pox after supposed vaccination."

But if he meant to spread a serious alarm, and to check the progress of vaccination, he has acted a consistent part. The title of his book, which is all that

people in general read, whether in an advertisement, or the window of a bookseller's shop, might perhaps do some mischief; and deter a timorous parent from adopting a practice, on which the lives of his children depend. It is, therefore, necessary to notice the work; and furnish an antidote to the poison.



# REMARKS,

*&c.*

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No one who has made vaccine inoculation his particular study, can be ignorant that there are three public institutions in this metropolis where it is practised; namely, the Inoculation Hospital, the Vaccine-pock Institution, and the Royal Jennerian Society for the Extermination of the Small-pox.

These I mention according to the order of time in which they were established. Dr. Woodville presides over the medical department of the first; Dr. Pearson over that of the second; and Dr. Jenner over that of the third.

The Royal Jennerian Society has opened fourteen stations for gratuitous inoculation, and the gratuitous distribution of matter. One of these, situated in Salisbury Square, is called the Central House; where the general meetings of the Society, and also the meetings of the Board of Directors, and of the Medical Council, are held.

When I first saw Mr. Goldson's pamphlet, which is dedicated to the Directors of the Vaccine Institution, I was at a loss to determine what institution was meant; but my doubt was soon removed by seeing a copy of the publication, addressed to the Directors of the Vaccine Institution, Salisbury Square. This error, however excusable in other respects, argues no great knowledge of the present state of vaccination.

Mr. Goldson wishes the Society to institute experiments, in order to determine whether there be not a limited period to the preservative power of vaccination. The Society, however, fully convinced of the absurdity of such an hypothesis, have not thought it necessary to comply with his request.

When that Society was first established, thousands of persons, vaccinated by its own members, had been put to the test of variolous inoculation, and exposed to the infection of the small-pox in every form; yet none of them had caught the disease. Thousands, nay tens of thousands, are at this time exposed to the infection of the small-pox, after vaccination, with impunity.

A considerable number of them were vaccinated four or five years ago; and many have been subjected to repeated inoculations with variolous matter, exclusive of frequent voluntary, as well as unavoidable exposure to the natural infection. It is, therefore, reasonable to conclude, that if the cow-pock were not a certain, permanent security against the small-pox, they could not all escape.

Mr. Goldson's cases were read before the Medical Society at Portsmouth; and Mr. Goldson seems to think they derive additional importance from this circumstance. We should all have thought the same, had he not told us, that the medical practitioners in that neighbourhood are charged with being a century behind the rest of the world in improvement.

He says, it has been asserted, that many persons, either from prejudice or obstinacy, have wilfully shut their eyes against conviction. He maintains that this was not the case at Portsmouth. It has, however, been suspected to be the case in some other great towns; and, when we consider how difficult it is to discover, whether others are influenced by a sense of duty and public spirit, or by prejudice, obstinacy, and self-interest, perhaps it may be thought quite enough for every gentleman to answer for himself.

The medical practitioners in the neighbourhood of Portsmouth have been censured for not commencing the practice of vaccination at an earlier period. It may be questioned, however, whether they did not begin too soon; for they began it before they had ever seen a single cow-pock. Mr. Goldson observes, that, prior to the nature of the disease being sufficiently understood, to use an expression of Dr. Jenner himself, "many persons took up the lancet, without ever having seen the true pustule; but," as he very properly adds, "he could not be answerable for all their blunders."

Mr.



Mr. Goldson thinks it a sufficient proof of the Portsmouth matter having been good, that it was sent thither by a public board: but he has not proved that it was not procured from some place, where the golden rule of Dr. Jenner for taking matter was disregarded; and where matter was frequently taken at so late a period, as to produce spurious pustules, and bring disgrace on the practice.

As Mr. Goldson has adduced no evidence that the matter was originally good, so he has offered none to prove that it did not remain on the lancets long enough to suffer injury before it was sent to Portsmouth. This was the more likely to happen, when it was taken in the worst mode possible, that is, on lancets; and had two offices to go through; at either of which these lancets might have remained long enough to become rusty. Mr. Goldson himself justly observes, that the success of vaccination is easily defeated, either from the matter having been originally inefficacious, or from its being deteriorated, and suffering a decomposition by a variety of means.

With the matter received from London Mr. Rickman inoculated five marines; and, with matter taken from the arm of one of them, he inoculated Clarke, whose case was communicated to the Committee of the House of Commons. This man, it was said, afterwards had the small-pox; and it is therefore an object of the first importance to ascertain, as far as possible, whether he ever had the cow-pock.

In order to form a proper judgment in this instance, it ought to be recollected, that the matter issued from a doubtful source; that it was not taken till the 11th day, by which time it has often lost much of its virtue, and is apt to produce a spurious pustule; and that the only witnesses of its effect were persons, who had not the least pretensions to any knowledge or experience in the practice. It is, therefore, no wonder the House of Commons considered this case as of no weight, when placed in opposition to the strong evidence brought forward by Dr. Jenner.

Mr. Goldson expresses a doubt, whether imperfect vaccination is possible. Few people, who read his pamphlet, will find it difficult to determine that question; nor can it escape notice, that, however perfect or imperfect vaccination may be, it is possible to give a very lame and imperfect account of the matter.

Mr. Goldson informs us, that Mr. Rickman vaccinated a child ; and takes care also to inform us of her christian and surnames, and of the month and day of the month on which the operation was performed ; but he does not tell us the age of the matter, nor the source from which it was derived.

He tells us, that one of the punctures, by which he probably means one of the pustules, was rubbed off very early ; but he does not tell us what became of the other ; nor whether any cow-pock or pustule of any kind appeared. He takes care to tell us, that the child afterwards had the small-pox, at which no one who has a grain of common sense can wonder ; and seems to think it a great proof of candour and liberality in Mr. Rickman, that he did not set this down as a case of perfect vaccination.

We are told that the occurrence of the small-pox after this imperfect vaccination, excited Mr. Rickman's attention. It would have been fortunate had his attention been excited by the failure of the operation : he would then probably have done, what is the indispensable duty of every practitioner in such cases, and have inoculated his patient again.

It is a little remarkable, that Mr. Goldson should boast of success, and congratulate himself and his neighbours on their having met with fewer failures than other medical practitioners, in the very book which contains the longest catalogue of failures ever published ; and which is full of failures from beginning to end. This is, however, a paradox which admits of an easy solution. When Mr. Goldson published an account of his having been unsuccessful in the practice of vaccination, it was natural the public should suspect him of want of skill, had he not told them that others were more unsuccessful than himself.

Mr. Goldson tells us, that in the course of his experiments, Mr. Rickman *soon found the matter run rapidly into a purulent state after the eighth day*. No stronger proof can be given that it was not good. This was the source of the matter first used by Mr. Goldson, and other gentlemen in the neighbourhood of Portsmouth :

Hoc fonte derivata labes,  
In patriam populumque fluxit.



*Case of Mr. Grant's Child.*

Before Mr. Goldson gives an account of his own practice, he relates the case of a child of Mr. Grant, clerk of the cheque in Portsmouth yard. This child had been vaccinated by Mr. Paytherus, in Oct. 1800. In October 1802, a younger child of Mr. Grant was vaccinated by Mr. Goldson, with matter obtained from Mr. Paytherus; and, in December 1803, both children were submitted to the test of variolous inoculation.

The effect of this inoculation, in the elder child, was such as to create an alarm of his having the small-pox. The report was circulated with great industry; and, as usual, with this addition, that the child had been vaccinated by Dr. Jenner.

On this occasion it is necessary to remark, that these false reports concerning vaccination may generally be traced to some person, who, from prejudice or self-interest, wishes to discourage the practice. For the truth of this, I appeal to every respectable member of the medical profession.

Sometimes, indeed, these unfavourable reports originate with persons who have no interest in depreciating vaccination; but even then, certain medical practitioners are always ready to lend all the hundred tongues of Fame, in order to proclaim the happy tidings to the world.

Nor are they backward in listening to such reports; or in purchasing and disseminating such pamphlets as are published against the practice.

When we reflect on the baseness and inhumanity of these persons, and see them using the weapons furnished by Dr. Vaume, and other enemies of vaccination, we may say, with little variation, and little fear of being censured for want of charity,

Arcum Nola dedit, dedit illis alma sagittam

Gallia; quis funem quam meruere dabit?

How far the medical practitioners of Portsmouth may be good, bad, and indifferent men, like the rest of their fraternity, I know not; but, if we will take Mr. Goldson's word, they are more candid, more unprejudiced, and more disinterested, than their medical brethren in general in other parts of the world. It is true the Rev. Rowland Hill, not content with doing good himself, but wishing to make others do good  
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also, had announced to the congregation at Orange Street Chapel, in Portsea, that their minister, Mr. Griffin, would in all probability practise gratuitous inoculation on his return from London. But, if the medical men of Portsmouth are so disinterested as they are represented to be by Mr. Goldson, it is impossible that any circumstance of that sort, could all at once excite in them a general opposition to the practice.

Having heard the report concerning the case of Mr. Grant's child, I wrote to Dr. Jenner, desiring to know whether he recollected having inoculated the child. He answered, in the negative; and at the same time requested, that I would undertake the task of inquiring into the particulars of the case.

Having written to Mr. Grant, he very readily favoured me with the following information.

The child, as before observed, had not been vaccinated by Dr. Jenner; but by Mr. Paytherus. When he was inoculated with variolous matter by Mr. Goldson, "the arm rose hastily; and, in five or six days, there was a pustule which contained a great deal of matter."

No one who knows any thing of the practice of physic can be ignorant, that those who have had the small-pox, are still susceptible of the local pustule; and the early appearance, and rapid progress of that pustule, are the best proofs that the patient is insusceptible of the constitutional disease.

Dr. Jenner, in his Inquiry, says, "It is remarkable that variolous matter, when the system is disposed to reject it, should excite inflammation on the part to which it is applied *more speedily than when it produces the small-pox*. Indeed it becomes almost a criterion, by which we can determine whether the infection will be received or not. It seems as if a change, which endures through life, had been produced in the action, or disposition to action, in the vessels of the skin; and it is remarkable too, that whether this change has been effected by the small-pox, or the cow-pox, the disposition to sudden cuticular inflammation *is the same, on the application of variolous matter*."

Mr. Grant informs me, that Mr. Goldson himself acknowledged the pustule was *too forward*, and unlike any inoculated.



inoculated small-pox he had ever seen before, *under such circumstances*; by which, I suppose, he means, that it was unlike any pustule he had ever seen, at so early a period after the insertion of the matter.

As Mr. Goldson assures us he does not wish to spread vain alarms, and that he should not think himself justifiable in concealing the cases which have fallen under his observation; it is difficult to conceive how he could think himself justifiable in bringing forward a partial statement of a case, and concealing a circumstance, which alone is sufficient, in this instance, to vindicate the character of vaccination from the charge he has brought against it.

It appears from Mr. Goldson's account, that on the morning of the fifth day, the arm of this child was rubbed, and the pustule broken; that about the same time, the inflammation became considerably more violent, and the suppuration was extended to the size of a vetch.

Those who are conversant in inoculation must know, that when any one who has had the small-pox, or the cow-pock, is inoculated with either sort of matter, for the sake of putting him to the test, a greater degree of itching is occasioned in the part, than what occurs in those who have not had either disorder. It is also well known, that a child about four years of age, like this, generally aggravates every symptom of the local disease by scratching and friction.

These circumstances account for the greater local affection, and consequent symptomatic fever, which took place in this instance; without reviving the ridiculous notion of the old women in Gloucestershire, that the cow-pock is a *temporary* preservative against the small-pox.

Mr. Grant's letter is too long to admit of insertion. It is, however, but justice to say, that it bears every mark of having been written by a very candid and intelligent man, anxious to ascertain the truth, and to promote the interest of the public.

It is, however, necessary to quote one passage of his letter, in order to shew how inaccurate a statement of this case Mr. Goldson has laid before the public; for it must be recollected, that if Mr. Goldson is not accurate in his statements, if the fidelity of his narrations can be impeached, whether the fault be a treacherous memory, or too many  
other



other avocations, his whole testimony must fall to the ground.

Mr. Grant says, about the fifth or sixth day, “ the child lost its natural flow of spirits ; and became occasionally heavy and torpid. On the seventh day he was still more torpid, *and evidently not well.*”

Mr. Goldson says, on that day (Saturday) the child *was perfectly free from fever, or ailment of any kind.*

Mr. Goldson is an active magistrate, and a surgeon in considerable practice. It is, therefore, more liberal to suppose, that other avocations prevented him from attending to the case, like an affectionate parent ; than that he would have suppressed any important facts, in order to make it appear, that the child did not sicken till the usual time of sickening for the small-pox.

As to the rigor, it is a common effect of suppuration ; and the small pimples which appeared the next day were, in all probability, nothing but a miliary eruption. This eruption, it is well known, is the natural consequence of a hot regimen ; and, in the present instance, there was a hot regimen with a vengeance.

First the child was rubbed before a good fire ; then recourse was had to flannel and warm Madeira ; and, lest any one stimulus should be wanting, an anodyne, as it is called, which commonly contains that powerful stimulus, opium, was administered by Mr. Goldson. With such an accumulation of heat, it is no wonder there were a few eruptions ; it is rather a wonder the child was not covered with eruptions from head to foot.

Mr. Goldson thinks there may be pustules without pus ; and small-pocks where there are no pocks at all. This requires no comment. It appears, however, that he is not the only medical man in the neighbourhood of Portsmouth, who maintains this opinion.

The small pimples which appeared, and have caused such a terrible alarm, did not suppurate ; but, in three days time, were covered with a warty scurf, which was rubbed off the following evening. If this is the small-pox, it is a sort of small-pox never heard of till now.

Mr. Goldson agrees with me in the opinion expressed in my second letter to Mr. Grant, that, “ the pustule appears earlier, and makes a more rapid progress, in those who have

had the small-pox or the cow-pock, than in those who have not yet undergone either of these diseases." He ought, in justice, to have added, that this really occurred in the case under consideration. He might, therefore, have excused himself from the painful task of bringing the present charge against vaccination before the tribunal of the public.

There are gentlemen at Portsmouth, it seems, who are satisfied with such eruptions as those before described, when they inoculate for the small-pox. We have all too often known gentlemen who were satisfied with such an appearance; and too often seen the ill consequences of that error.

This was one of the principal causes of the unpopularity of inoculation for the small-pox. It is also one of the principal causes of the unpopularity of the cow-pock. Ignorant practitioners, at least practitioners ignorant of vaccine inoculation, imagining, as the ignorant are apt to do, that they know every thing which can be known, and satisfied with the result of their own operations, commit blunders which they afterwards think it their interest to conceal. Some medical men, deceived by appearances, publish unfavourable reports of vaccination, believing them to be true; but this is not sufficient to disprove the opinion commonly entertained by the most eminent members of the medical profession, that when either species of inoculation fails to produce the desired effect, the fault is in the practitioner, and not in the practice.

Fully convinced of this, I published the following observations in the Medical and Physical Journal for December 1801:—"I lately received a letter from a gentleman in the county of Berks; in which he asks, whether the mass of evidence in favour of vaccine inoculation is really so great as it is pretended to be. This query was occasioned by some *pretended* failures; for it is not likely that two or more instances of real failure should happen at one time, and in the practice of one professional man; when so many other individuals have inoculated from a hundred to a thousand each, all of whom have resisted every form of the variolous infection to which they have been exposed.

"Exclusive of other fallacious appearances, which have given rise to mistakes in the practice of the new inoculation, such as anomalous pustules, there is another fertile source of error. The chicken-pox is frequently mistaken for the small-



pox. Several instances of this kind have fallen under my own observation within a short time. Hence, persons who had undergone vaccination, have been supposed to have the small-pox in the natural way, when the disease was the chicken-pox; and this latter has, in many cases, been inserted by way of inoculation, instead of the small-pox.

“ While unfavourable cases are circulated with great industry by professed enemies of vaccine inoculation, or its *pretended friends*, it appears to me, that the real friends of the practice, lulled into a state of false security, are become rather remiss; and, being convinced themselves, imagine that the public are convinced also. Hence they leave the field to their more active opponents; who improve the favourable occasion to their own advantage.

“ The mildness of the cow-pock is now undeniable; but, with regard to its efficacy as a preventive, there is a doubt remaining in the minds of many persons not much experienced in the practice, which challenges farther investigation. I therefore consider it a duty to the public, to the cause of truth, and to Dr. Jenner, to declare, that, having inoculated with vaccine virus as many as my other avocations would permit, and having particularly sought for patients in those places where the small-pox raged, I have never yet been able to discover a single instance, where any one who had undergone vaccine inoculation proved susceptible of the infection of the small-pox.

“ These proceedings have been watched with a jealous eye, by persons not interested in concealing any real or apparent failure; whose silence, after the most severe scrutiny, is a stronger argument in favour of the new practice, than any attestation of mine.

“ I have now inoculated above eleven hundred, who have gone through the vaccine affection in a regular way; and, after convincing myself of the certainty of this preventive, by repeated inoculations with variolous matter, left the task of putting the remaining part of my patients to the test of variolous contagion in the natural way, to their parents; and their compliance with my request has been so general, that, independent of accidental and unavoidable exposure I have, reason to believe, at least nine out of ten have been voluntarily subjected to this test.

“ It necessarily follows from these observations, that the preventive employed by some practitioners is less efficacious;

or



or the test to which their patients are afterwards submitted more powerful. In order to decide this question, if any gentleman who has infected two, ten, or twenty of his own vaccine patients with variolous matter, will take the trouble of inoculating mine with the same, I will furnish him with at least a thousand, on whom he may exercise his skill. This offer, the opponents of vaccine inoculation, and its *pretended friends*, ought to accept, or, in decency, to be silent."

Notwithstanding so long a time has elapsed since this offer was made, yet no enemy of vaccination has thought proper to accept it. They very prudently prefer inoculating *their own cow-pock patients* for the small-pox; in which they are too often successful.

One gentleman, indeed, Mr. Connor of Wardour Street, who authorizes me to mention his name, being rather sceptical, and wishing to put the cow-pock to a fair trial, inoculated two children who had been vaccinated by me, with recent variolous matter, taken from the arm of his own child. With this he filled several incisions, but without effect. In consequence of such a decisive experiment, he very candidly communicated the circumstance to me; and, from that moment, adopted vaccine inoculation in his own family, as well as in his general practice.

I have now vaccinated three thousand patients. Some of them I have inoculated with variolous matter once, others twice. The greater number of them have been several times exposed to the infection of the natural small pox; yet not one of them has ever caught the disease.

Mr. Goldson admits, that the same train of symptoms may be excited in persons who have had the small-pox, by inoculating them with variolous matter, as took place in Mr. Grant's child; and declares that the truth of this fact is substantiated by good authority. But he seems to think, that this has happened almost as seldom as an attack of the natural small pox a second time.

This is a most extraordinary assertion. With respect to the natural small-pox a second time, there are but few well-authenticated cases on record. One is published by the late Mr. Withers of Newbury, in the fourth volume of the *Memoirs of the Medical Society*. In this case, the patient had the disorder at the same time with his sister, who died of it; and I have been assured by a person who saw him, that he

was disfigured by it in a remarkable degree. He afterwards fell a victim to that disease.

But, with regard to the effects of inoculation with variolous matter, in those who have already had the small-pox, it must be recollected, that it was not usual to try experiments of this sort; and that it would have been the extreme of folly to make it a common practice, since there are abundant proofs on record, that it was not always attempted with impunity.

The following is an instance of the effects of variolous inoculation in one who had already had the small-pox. A boy who lived with Dr. Jenner, being inoculated a second time, in order to ascertain whether he was secure, his arm inflamed to a considerable degree, and he became indisposed. Two years after, he was a third time inoculated with variolous matter; the same ill consequence took place in his arm, and was succeeded by boils about his shoulder. Many similar instances, Dr. Jenner observes, are on record; and others that are still more striking.

Dr. Jenner was aware of the ignorance of too many persons, who set themselves up as judges of inoculation. He therefore published, in the Second Part of his Treatise, some remarks on this subject; which some persons, whose duty it is to understand these particulars, have not read, or read to very little purpose.

He says, "As the effects of the small-pox inoculation on such as have had the cow-pox, will be watched with the most scrupulous eye by those who prosecute this inquiry; it may be proper to bring to their recollection some facts relative to the small-pox, which I must consider here as of consequence, but which hitherto seem not to have made a due impression.

"It should be remembered, that the constitution cannot by previous infection be rendered totally unsusceptible of the variolous poison: neither the casual nor the inoculated small-pox, whether it produces the disease in a mild or in a violent way, can perfectly extinguish the susceptibility. The skin, we know, is ever ready to exhibit, though often in a very limited degree, the effects of the poison when inserted there; and how frequently do we see among nurses, when much exposed to the contagion, eruptions, and these sometimes preceded by sensible illness! yet, should any thing like an eruption appear,



pear, or the smallest degree of indisposition, upon the insertion of the variolous matter on those who have gone through the cow-pox, my assertions respecting the peculiarities of the disease might be unjustly discredited.

“ I know a gentleman, who many years ago was inoculated for the small-pox ; but having no pustules, nor scarcely any constitutional affection that was perceptible, he was dissatisfied, and has since been repeatedly inoculated ; in consequence of which, a vesicle has always been produced in the arm, with a swelling in the axilla, and a slight indisposition. This is by no means a rare occurrence. It is probable that the fluid thus excited upon the skin, would always produce the small-pox.”

Mr. Fewster of Thornbury communicated to Dr. Jenner the following case. A child, who was inoculated for the small-pox, had a plentiful eruption on the face. His nurse-maid, who had the disorder many years before, and was much pitted with it, used to let him sleep on her left arm ; so that his face was in contact with her left cheek.

The consequence was, that in little more than a week, a considerable eruption appeared on this cheek, which went on to maturation. Three days before the appearance of the eruption, she had slight chilly fits, pain in her head and limbs, and some degree of fever.

On the second day of the eruption, she complained of a slight sore throat. Mr. Fewster seems doubtful, whether these symptoms were occasioned by this occurrence of local small-pox ; but, I apprehend, without reason. I have related, in my Treatise on the Cow-pox, a case of Mrs. Fraise, now living at Southampton, who had several small-pocks on her face, and her breast, from the same cause ; accompanied with more violent fever and pain in the head, than what sometimes attend the disorder, when it occurs the first time.

With matter from the nurse-maid, Mr. Fewster inoculated two other children, and produced the perfect small-pox. The late Mr. Kite of Gravesend excited a variolous pustule on his own arm ; and sent some of the matter to Chatham Barracks, which proved effective. A late Professor at Edinburgh used to mention, that an itinerant inoculator practised this method on himself, for the sake of preserving a constant supply of variolous matter.

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The possibility of having a local variolous pustule after the small-pox, or the cow-pox, having been often ascertained, I hope that in future, when gentlemen meet with such cases, they will not deem it necessary, or even justifiable, to put the matter to the test, by inoculating with that deadly poison any persons who have not yet had the disease.

Such an experiment, when matter is taken from a pustule in one who has been previously vaccinated, not only tends to spread the contagion of the small-pox, but also to excite a doubt of the efficacy of vaccination in the mind of the public.

Mr. Goldson is much mistaken in supposing, that the same, or nearly the same train of symptoms which took place in Master Grant, is so rare an occurrence in those who are inoculated with variolous matter after they have had the small-pox. One case of the kind is that of Mr. Miles, communicated, with many others, to Dr. Jenner.

This gentleman, who had, at different times, inoculated not less than two thousand persons, inserted a little variolous matter into the back of his hand, for the sake of shewing how he performed the operation. The consequence was, that a pustule arose; and on the eighth day he was seized with all the symptoms of the eruptive fever, in a much more violent degree than when he was first inoculated eighteen years before. As a proof that the first inoculation was effectual, he had a considerable number of pustules.

“On the tenth day from the second inoculation, he felt a very unpleasant sensation of stiffness and heat on each side of his face; which terminated in three or four pustules, attended with inflammation. The pustules did not mature.”

Let the most determined enemy of vaccination point out any thing in the case of Mr. Grant's child, more like the small-pox than this. But it is proper to observe, that in the present instance, there was a violent fever from the infection alone; whereas, in Mr. Grant's child, it was aggravated by the inflammation occasioned by rubbing, and rupturing the pustule; and also by a hot regimen.

There is no room to doubt, that cases similar to that of Mr. Miles, and others before mentioned, often occur. Nevertheless, the insertion of such cases, when they happen after vaccination, is of service to those who write against  
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the practice ; because the majority of their readers know as little of the subject as themselves.

Mr. Goldson and his friends, with all their scepticism, can scarcely doubt that Mr. Fewster, the celebrated inoculator at Thornbury, had had the small-pox ; yet this gentleman, after being exposed to the effluvia for forty years, without receiving infection, happening to wound his finger with the point of a lancet charged with variolous matter ; the puncture inflamed and suppurated ; and he had a considerable number of pustules on his forehead.—This is a case which deserves attention.

Mr. Scott, another surgeon in the same town, had the small-pox by inoculation ; and it proved of the confluent kind. Yet he caught it again twenty years after, from a patient whom he was attending, and had it with some degree of severity.

A case equally strong was published about two years ago in the Medical Journal. Others, well authenticated, are to be found ; a circumstance which ought always to be remembered by those, who pretend to give any opinion about vaccination.

It should also be recollected, that those who had the small-pox were not in general put to the test of a subsequent inoculation ; otherwise, any one may judge, from the foregoing specimens, what would have been the result. Even when persons who had been inoculated once with apparent success, were inoculated a second time for the sake of satisfaction, if any thing like the small pox appeared, it was the interest of the inoculator to conceal it ; and not to publish his own disgrace. Instances, however, have been communicated to the world by others, in order to prove, that whatever charges are brought against the inoculation of the cow-pock, the same may be brought against the inoculation of the small-pox.

Dr. Lettsom, in his “Observations on the Cow-pock,” says, “From the experience I have had, I cannot bring my imagination to conceive, that any healthy subject can die of a process, which can hardly be called a disease ; or, in other words, that a single pustule can prove fatal.

“Prejudice and ignorance have given rise to various reports ; which inquiry has proved to be unfounded. It must, however, be acknowledged, that many mistakes have  
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been committed by practitioners. Matter has been taken from the chicken-pox, and too frequently from the purulent fluid round the scab of the cow-pock, or in the variolous pustule; and, in either case, it is needless to say, inoculation under such circumstances, is no security against the small-pox.

“It is not in vaccine inoculation alone, that mistakes have been committed; even by practitioners of established character. I lately attended two young persons under the small-pox, each an only child, of considerable family; who had been inoculated two or three years before by respectable men; and the mothers of the children shewed me, what they conceived to be the marks, or pitting, from the inoculated small-pox.

“Happily, they both recovered from an alarming eruption of the disease: but two relations I once claimed, who were inoculated with matter supposed to be variolous, by an eminent inoculator, afterwards caught the small-pox, and to one of them it proved fatal. These instances of error, so injurious to the medical character, and distressing to the community, should excite the most guarded circumspection in the professors of the healing art.”

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Mr. Goldson suspects that an eruption of pimples seldom occurs in those who are inoculated with variolous matter soon after they have undergone vaccination. In this respect he is greatly mistaken. The same thing happened in the child of Mr. Boddington, inoculated by Dr. Jenner; in the child of a medical man, alluded to in my letter to Mr. Grant; and in the child of a gentleman in Devonshire Place, which is mentioned in my Treatise on the Cow-pox, p. 948.

In the last case, when the child was put to the test of inoculation with variolous matter, after vaccination, the arm inflamed and festered, so as to make him uneasy; but no pustulous eruption was produced. Two or three pimples appeared; which did not maturate, nor bear any resemblance to the small-pox.

It was stated to me by a physician in my neighbourhood, that fever attended this case; which he understood to be a certain



certain indication of constitutional disease. This is true; but other proof is necessary to shew that this constitutional disease is the small-pox.—It may proceed from dentition, or from a common cold; or even from the irritation of the local pustule, as in the cases before related.

In these instances, and many others, in which the patients were put to the test of inoculation with variolous matter soon after vaccination, the same symptoms took place as in Mr. Grant's child; and in others, who were falsely supposed to have had the cow-pock, the small-pox was really produced, as in some of the patients who had been inoculated with the *Portsmouth* matter.

It was before observed, that Mr. Goldson had omitted to mention one circumstance which would have been a proof that the child was rendered as insusceptible of the small-pox by vaccination, as it would have been by inoculation with variolous matter. Some of his medical readers may discover the fact from the history of the case; but, it would have been only candid to have informed the public, that the pustule was premature, as it is in those who have had the small-pox before.

In like manner, he only notices in a cursory way, that the pustule was ruptured by friction; and leaves it to the unlearned, as well as to the learned, to draw the natural inference, that this had a considerable share in the violent inflammation, and symptomatic fever which ensued.

The second case related by Mr. Goldson, in which an eruption appeared, is one of a child inoculated for the cow-pock by himself; and in which the pustule was *perfectly* satisfactory to *himself*. The result of the case, when properly investigated, will, I have no doubt, prove satisfactory to every one *but himself*.

This child was afterwards frequently exposed to the infection of the small-pox, which she resisted; till Mr. Goldson inoculated another child in the same house for that disease, and desired that the child who had been vaccinated might sleep in the same cradle with the infant who had the small-pox. The consequence was, that seven pimples appeared in parts exposed to the contact of the  
D pustules

pustules in the other child ; but none of them matured. Constitutional symptoms also took place. There was pain in the head and back, attended with fever.

Were every human being doomed to suffer such an affection as this once in his life, instead of the horrors of the small-pox, he would have no great reason to complain. But we have no proof that the child had been effectually vaccinated. It is not evident that her case was not one of those cases of imperfect vaccination, which the soil of Portsmouth seems to have produced in great abundance.

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The third case related by Mr. Goldson, is that of another child inoculated by him with supposed cow-pock matter, in Jan. 1801. In this case also, the pustule was *perfectly satisfactory to himself*.—His opinion of the security of this child was confirmed by the following occurrence. In April 1803, he inoculated another child in the same family with the small-pox. The two children were kept constantly together ; and alternately slept in the same cradle ; yet the child who was supposed to have undergone vaccination, escaped the small-pox. This was considered by Mr. Goldson as a proof of security from future infection ; as far as such security could be attained by vaccination.

The child has since caught the small-pox in the natural way ; but we have no proof that she ever had the cow-pock. It is true Mr. Goldson was satisfied with his own performance. But it will be difficult for him to render it satisfactory to others, till he brings evidence that his vaccine patients are as secure from the small-pox, as those who are inoculated by other practitioners.

It is too ridiculous to conclude, that, because a child did not catch the small-pox when she wore an infected night-cap, she could never catch it while she lived ; and, unless gentlemen can bring better proofs than these of a temporary security arising from vaccination, they had better put on their own nightcaps, and go to bed.

The truth is, that it is no uncommon circumstance, for a person to catch the small-pox who has resisted it before ; and even resisted it for a long time, in every form, and every degree of exposure. Many a parent, after attending several children



children successively in the small-pox, and arriving at an advanced period of life, has at length fallen a victim to that disease.

It may be doubted, whether Mr. Goldson was ever a friend to vaccination. Had he really wished well to the practice, he would not so often have inoculated children for the small-pox in the same families where he had inoculated others for the cow-pox; without first inoculating them with cow-pock matter, and giving them all the chance they could derive from vaccination.

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The fourth case published by Mr. Goldson, is one which occurred in the practice of Mr. Weymouth of Portsea. A child was inoculated with supposed cow-pock matter in March 1801; and was thought by Mr. Weymouth to have the regular disease. In April 1802, it was inoculated with variolous matter. The arm inflamed, and matured in the usual way. There was one pustule besides, which was on the arm; and there were several pimples which did not mature, in other parts. There was also constitutional indisposition.

In this case, therefore, one small-pock appeared; and of course, the child almost had the small-pox. Whether it had previously had the cow-pock, is neither very easy, nor very necessary to be ascertained: since it is not necessary, but a matter of choice, to inoculate for the small-pox after the cow-pock; and there is reason to believe, that if this child really had the cow-pock, it never would have caught the small-pox in the natural way. It is much more probable, that it never had the cow-pock: but even if it were otherwise, we have no evidence that the child did not scratch the original pustule, and produce a second by the insertion of some of the matter; a circumstance which is not uncommon, in either species of inoculation.

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The fifth case is one of a child, said to have been vaccinated by Mr. Weymouth in March 1801; and inoculated with variolous matter in May 1802. In this case, we are told,

there were *no eruptions*; but a number of *pustules* round the inoculated arm. This inconsistency, and many others, which are too glaring to escape notice, in the publication before us, I must leave to Mr. Goldson to reconcile.

What the *pustules* were in this case, we are not told: probably some of Mr. Goldson's *pustules* without *pus*.—It is no wonder constitutional symptoms took place; for we are told the arm was *full of matter*. It is no wonder there was plenty of matter; for when gentlemen put their patients to the proof, they generally take care to charge them well.

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The sixth case, that of the marine inoculated by Mr. Rickman, has already been noticed.

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Mr. Goldson observes, that an inquiry into this subject is *now* become interesting to society. It was, however, equally interesting, and as well known to be so, to every man of common sense, before he took up a lancet to disgrace vaccination, or a pen to spread a false alarm, as it is now. It is certainly a very notable discovery, that a practice is *now*, as it were, for the first time, interesting, which long ago engaged the most serious attention, and received the most solemn sanction of the Parliament of Great Britain.

Mr. Goldson solicits the Vaccine Institution to make fresh experiments, in order to decide a question which is long since decided. What institution he means may, like a considerable part of his observations, admit of a doubt. Whether there be any vaccine institution that will so far disgrace the cause, as to repeat such experiments at Mr. Goldson's request, and whether there be any vaccine institution that would not disgrace itself by such an act, I shall not presume to determine; but the Royal Jennerian Society have passed a resolution, that Mr. Goldson's pamphlet does not, at present, require any notice from them. I trust they will still adhere to that resolution:

Nec deus intersit, nisi dignus vindice nodus.



It does not require a hundred able heads to plan, nor a hundred able hands to execute, the simple task of putting vaccine patients to the test. It is what any head, however weak, can plan, and any hand, however unskilful, can execute.

But when we consider what a vast number of persons have been vaccinated in this metropolis, and are daily exposed to the danger of catching the small-pox in the natural way, we cannot but deem it a work of supererogation to try such experiments again if they are innocent, and a crime to try them again if they are attended with danger.

The danger, certainly, is not to be compared with that of the natural small-pox; it was therefore our duty to make some experiments of this kind at the commencement of the practice, in order to ascertain its utility. It may still be justifiable to put patients to the test, at their own particular request, or that of their friends; but it is not justifiable in any man to spread an alarm, without first knowing what has already been well ascertained; and the efficacy of vaccination is already so well ascertained, that there is no inoculator of reputation, who is not at present able to satisfy the minds of his vaccine patients and their friends, without the assistance of any test.

No practitioner, who has the least regard for his own character, will decline putting any one to a test, if absolutely required by those who are concerned; but the only test to which vaccine patients can be put, without some degree of danger, is exposure to the natural infection of the small-pox.

Impressed with this sentiment, I made the following remarks in my letter to Mr. Grant; but, if we may judge from Mr. Goldson's publication, the warning I gave has made very little impression on him.

“ In the present instance, if we admit variolous matter to have been the cause, the cow-pock, at least, is innocent; because it is not necessary, but only a matter of choice, to put a patient to the test of variolous inoculation after the cow-pock. Accordingly, I have long since discontinued the practice, and advised others to do the same; satisfied with exposing my patients, after vaccination, to the natural infection of the small-pox.

“ This, which, on my assurance of safety, is submitted to with the utmost confidence, has removed all remaining doubt from the parents of the children vaccinated by me,  
who



who now amount to about two thousand five hundred. Many of these have been put into bed with persons labouring under the confluent small-pox, or wrapped up in sheets just taken off from the beds of variolous patients, with impunity.

“ To convince you of the truth of the foregoing observation, respecting the possibility of exciting an eruption, in one who is insusceptible of the perfect small-pox, by inoculation with variolous matter, I shall quote a passage from Buchan, which I read many years ago in the Medical Magazine; and which made so deep an impression on my mind at the time, although I never had seen it since, that your letter recalled it to my memory. It is as follows :

“ ‘ It has been a question among physicians, whether any danger would attend inoculation, supposing the patient to have had the disease before. This question has generally been answered in the negative; but, from several facts which have occurred in my practice, I am inclined to believe it merits further consideration. April, 1764, in order to satisfy her relations, I inoculated a girl about 6 years of age; who, there was reason to believe, had had the small-pox before. She had no eruption, except a very few hard pustules, resembling warts; which never rosé, nor seemed to contain any matter. They disappeared, and a hectic fever, with putrid symptoms, ensued, which ended in an almost universal mortification of the whole body, of which she died.

“ ‘ A gentleman of my acquaintance, who practised inoculation very extensively, had taken as much matter from a patient in the small-pox, as was sufficient to inoculate forty or fifty others. For this he had been obliged to open a good many pustules; and while his hands were daubed with the matter, happening to cut one of his fingers, he immediately put his thumb on it to keep in the blood, and held it there for some time till a rag was got, with which he bound up the wound, and took no further notice of it.

“ ‘ About eight days after, he began to feel an unusual weariness upon the least motion, and complained of a dull pain of the head and loins; with a listlessness, and want of appetite. On the ninth, or tenth, in the evening, he complained of sickness; and was actually seized with a syncope, or fainting fit.

“ ‘ On the next morning an eruption appeared, which was



pretty universal, but thickest upon the limbs. This had indeed, more the appearance of a rash, than of small-pox; but as it appeared about the same time after receiving the wound, that the small-pox generally do after inoculation; as the symptoms, previous to the eruption, were the same with those which usually precede the eruption of the small-pox; and as the eruption continued upon the skin about the same number of days that the small-pox generally do, there seemed to be a good deal of reason to conclude, that the disease had proceeded from a quantity of the variolous matter, which had been introduced into the blood by the wound.

“ ‘ This patient, indeed, recovered by the help of medicine, and a good constitution; but had the latter been wanting, which was the case with the first-mentioned patient, he might have shared the same fate. This gentleman had had both the small-pox and measles, in the natural way, many years before.

“ ‘ Several other cases have occurred in my practice, where the constitution seemed to suffer, from variolous matter introduced into the blood, without producing what could properly be called the small-pox. This ought, at least, to make practitioners careful not to communicate the poison, unless where there is a prospect of exciting the disease. Neither ought they to be too solicitous in suppressing the eruption; as that seems the only safe way in which the virus can be discharged, after it has got into the blood.’—BUCHAN.

“ The frequent coincidence of such symptoms, after variolous inoculation, whether that inoculation has been performed after a patient has had the small-pox or the cow-pock, leaves no room to doubt, that they may be the effect of such inoculation; but it by no means follows, that the eruption is of the variolous kind.”

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Mr. Goldson's remarks on the instability of the practice, when it was in its infancy, are very inconsistent with the candour which he professes. It was not reasonable to expect that vaccination, or any other practice, could be all at once brought to perfection; but it is well known to every one, who has paid proper attention to the subject, that Dr. Jenner saw the advantage of taking matter from a newly-formed

formed pustule, at a very early period after he commenced vaccination ; and that he has never changed his opinion in this respect. If others, with whom he has neither fellowship nor connexion, recommended matter taken from under a scab, or any other matter, whether taken on the 13th day, or the 30th day, for the purpose of vaccination, he is no more answerable for their blunders, than he is for blunders committed at Portsmouth. One, and not the least, is that committed by Mr. Goldson, when he fancies it is the opinion of any respectable practitioner, that the whole success of vaccination depends on taking matter at the proper time.

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#### ON THE CASUAL COW-POX.

Mr. Goldson admits, that the casual cow-pock is a permanent preventive of the small-pox ; but doubts whether it does not lose this property when it has passed once through the human subject. It is much to be regretted, that he did not make himself a little more master of the subject on which he has written, before he spread an alarm, which will excite groundless apprehensions in the mind of many a timorous parent ; and may, perhaps, for a while retard the present happy progress of vaccination.

In order to support his absurd hypothesis, that vaccination is a temporary preservative, he asserts that for two years it gave absolute security from the small-pox. It has been before remarked, that Mr. Goldson deals in bold assertions. Any one who reads this, would suppose, that the child was constantly, or at least frequently exposed to variolous infection during the period above mentioned. But by perusing the case it will be seen, that the vaccine patient was only exposed to the infection of the small-pox in one subject.

Mr. Goldson imagines that the pustule excited by matter immediately from the cow is blue, but that it loses this colour by one transmission through the human subject.

This circumstance he thinks of material importance ; and asserts that it has not been sufficiently attended to. Here he once more gives a proof of his dealing in bold assertions. Had Mr. Goldson himself attended a little more to the study of vaccination, before he attempted to write

on



on the subject, he would not have committed so many mistakes.

In my Treatise on the Cow-pox, p. 137, I have remarked, that “as to the blueness of the pustule, which Dr. Woodville considers as a diagnostic of the casual disease, it arises from the greater degree of irritability, vascularity, and exposure of the parts affected; and is neither always met with in the casual, nor always wanting in the artificial disease. I have repeatedly seen it when the pustule of an inoculated patient has been injured by pressure or friction, to which the pustules in the casual complaint are constantly exposed; and in one instance which I saw, where a medical man inoculated his thumb by accident, Dr. Jenner told me, that it exactly resembled the casual disease.

“Hence also it appears, that arguments wholly founded upon the strict analogy between the inoculated and the casual cow-pox, ought not to be considered so inconclusive as Dr. Woodville imagines. Yet Dr. Jenner’s arguments are not wholly founded on analogy; they rest also on the solid foundation of well-established facts.”

In the same work, p. 143, are also the following observations: “Among other arguments urged by Dr. Woodville, to prove that the casual and artificial cow-pox differ, one was, ‘that the local affection in the former case constantly exhibits a dark blue colour; an appearance which the inoculated disease never assumes.’

“When Dr. Woodville made this assertion, he did not recollect the following passage in his former publication. It occurs in the forty-fourth case. ‘He had been inoculated in the hand, as well as in the arm, in order to discover if the appearance of the tumour, in a part constantly exposed to the air, would be the same, as in the arm kept covered by his dress. *The difference was very evident*; for the tumour upon his hand was much more extensive, *of a more livid colour*, and attended with more inflammation than the other.’

“Dr. Woodville is not only inaccurate in saying, that the colour in the artificial disease is never the same as in the casual; but in his description of the colour of the casual cow-pox; which, he says, is constantly of a deep blue. Dr. Jenner, who must be allowed to have seen it much more frequently, says, that it is of a colour *distantly approaching to blue*; and that the natural disease in the animal is of a *palish blue*, approaching to livid.”

In order to remove any doubt that might still remain, I wrote to Dr. Jenner on the subject, and received an answer to the following purport. Dr. Jenner and Mr. Henry Jenner have inoculated several persons in the usual part of the arm with matter immediately from the cow; and both declare, that the blue-tinted pustule is not more frequently excited by such matter, than by matter regenerated in the human subject.

I also wrote to Mr. Tanner, the veterinary surgeon, whose opinion coincides with that of Dr. Jenner, and Mr. Henry Jenner; that the cow-pock produced by inoculating with matter from the cow, sometimes appears of a bluish cast, and sometimes otherwise, in the same manner as it does when the virus is transferred from one human subject to another.

The sixteenth case related by Dr. Jenner in his Inquiry, is one of the casual cow-pox. In this case, there was a pustule of a livid hue on the back of the hand, and two on the wrists, which were free from that colour.

The seventeenth and nineteenth are cases of inoculation with matter immediately from the cow. In the first, the pustule was rather livid; but in the latter, it was free from this tint.

Hence it appears evident, that no argument can be drawn from the colour of the pustule, of the superiority of matter from the cow: but, perhaps, Mr. Goldson thought this an *argumentum ad hominem*, when he addressed himself to that silly animal, John Bull.

Mr. Goldson says, "There *certainly* is a difference in the appearance of the pustules; that in the casual disease they are more prominent, and have a bluish cast." Here we have more than one proof of Mr. Goldson's dealing in bold assertions. In the first place he has given no authority for asserting, that the casual pustule is more prominent than the artificial. It is true Dr. Jenner states, that in the sixteenth case described by him, which is one of casual cow-pox, the pustule on the back of the hand was large; but this appears to have been occasioned, by the patient receiving infection in a part previously injured by the scratch of a thorn.

The two pustules on the wrists were caused by the reception of virus in parts where there had been minute abrasions  
of



of the cuticle. These are neither larger, nor more prominent, than pustules excited in an artificial way, by puncture. The difference in colour, it is already shewn, does not depend on the virus.

Mr. Goldson is at a loss to conceive, how any one who has had the cow-pock, which is *neither eruptive nor contagious*, should be secure from an attack of the small-pox, which is possessed of both those qualities. He must be equally at a loss to conceive, how any one who has had the small-pox, which is both eruptive and contagious, should be secure from a second attack of the same disease.

This should teach him a little humility, and induce him to adopt the opinion of that great man, whom the learned world justly consider as an oracle on these occasions: "We are not to determine beforehand by any fanciful hypothesis, but to ascertain by actual experiment, what nature will do, or suffer to be done."

Mr. Goldson observes, that there is no perfect analogy between the small-pox and the cow-pock; and affirms, that time only can decide whether the effect of the cow-pock is permanent. This has been the language of all the enemies of vaccination, for five years past. It was on this account, Dr. Moreau of Paris remarked long ago, "that it is not necessary to prove the two diseases to be exactly similar, because different causes sometimes produce the same effect." He maintains, "that the laws of the animal economy are only to be learned by experiment and observation; and that all the finespun theories which say to nature, Hitherto shalt thou go and no further, are to be considered as the phantoms of imagination, and the follies of a day."

He maintains, "that the utility of vaccine inoculation is no longer problematical; that its advantages are fully ascertained; and that it is now making a rapid progress in all parts of Great Britain, where prejudice and self-interest attempt in vain to deprive the public of the benefits of the practice, and to check its career."

He observes, "that the inoculation of the small-pox, as well as that of the cow-pock, was received with reluctance, by those whose duty it was to have cherished and promoted every improvement of the healing art; and that in France, the advantages of vaccine inoculation are daily rendered more and more evident, in spite of the opposition

and misrepresentation of those practitioners, whose prosperity unfortunately depends on the inoculation of the small-pox." These gentlemen will say, with their brother in *Romeo and Juliet*,—Our poverty, and not our wills, consented.

Dr. Moreau maintains, "that we have ample proof of the utility of the practice; that it is an insult to common sense to say with a serious and solemn tone, Time and experience must decide this question; and to demand of posterity, what so many thousands of experiments will enable the present age to determine."

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*Remarks on Mr. Goldson's Postscript.*

Two other cases are here related, in which Mr. Goldson supposed a slight degree of the small-pox to take place in patients whom he had before inoculated with vaccine virus. Whether they really had the small-pox, it is not possible to say; but if they had, it remains to be proved by less exceptionable evidence, that they ever had the cow-pock.

Had the pretended failures been few in proportion to the successful cases, or had any thing of a similar kind occurred in the practice of any other respectable inoculator, it would be more difficult to decide where the blame is justly due. Nothing can tend more to elucidate this point, than the following observations relative to some failures which occurred at Oxford.

Extract of a Letter from Dr. Wall, dated Oxford, March 29th, 1802. "From the day when I first received intimation of Dr. Jenner's discovery, to the present hour, I have never once varied in my opinion; though cases, exciting scepticism in some gentlemen, have occurred in this neighbourhood. Many of them have been explained; and the others might, I have no doubt, had it been possible to develop the whole progress of the several cases."

Extract of a Letter from Dr. Wall, dated April 13th, 1802. "With respect to the cases of those children, you and the gentlemen of the committee have had my opinion fully. I do not believe they ever had the genuine cow-pox. So many thousand cases have occurred, to prove the efficacy of vaccine inoculation in preventing the small-pox, that in  
any



any instance, where an exception appears to a law so generally established, I am always disposed to conceive there has been some mistake, or inaccurate observation.

“ In many instances we have been able to trace the error, and detect the fallacy. One occurred in this place to Dr. Jenner and myself. In many other similar instances (and many such have occurred, and will occur, from the hasty inattentive mode in which the inoculation is performed by ill-judging and careless persons), the fallacy has been detected.

“ In some, from distance of time, and other circumstances, it has been impossible to develop the mistake with equal satisfaction. But if it has been demonstrated in ten thousand instances, that vaccine inoculation will prevent the small-pox, what force, in opposition to such a general law, can ten, twenty, or even a hundred exceptions have; especially where it can be shewn, that many of these exceptions have been cleared up; and have ultimately afforded convincing proof of the general truth?

“ Where positive demonstration cannot be adduced, analogy may be called in to our aid. The history of the inoculated small-pox will afford us much assistance. A gentleman of this neighbourhood inoculated the inhabitants of two or three villages, as he thought, with variolous matter; in which an eruptive fever, and a mild form of disorder resembling the small-pox, came on at the usual time. But after these people had been well some months, nearly half of them received the small-pox by contagion; and some of them had it very unfavourably.

“ About the same time, a gentleman of eminence in the profession, residing in Kent, very candidly published, I think, in the fourth volume of the Memoirs of the Medical Society of London, an account of a similar failure in variolous inoculation, under his care. Now let me ask, do these cases, and many more of the same kind, excite in any one's mind the smallest doubt, whether the artificial introduction of variolous matter into the human body, is a certain preventive of any subsequent influence of that matter on the same person, either naturally or by inoculation?

“ Is it not immediately concluded, that there must have been some error in the conduct of the inoculation, and that those persons who are supposed to have had the small-pox a *second* time, certainly had in the *first* instance some other fallacious eruption, and not the genuine small-pox?

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In the case of the vaccine disease, we ought to reason in the same way.

“ With respect to the three exceptions which have occurred here, they have never shaken my faith in the general law; which, I think, has been as demonstrably proved, as any proposition in natural philosophy or geometry : and I doubt not but a time will come, when the medical world will express its wonder, that so many difficulties should have been raised upon such slight foundations, to prevent the progress of a discovery so highly advantageous to mankind, and so honourable to the discoverer.”

Dr. Wall then expresses his concern, that an erroneous account of these apparent exceptions to the general rule had been transmitted to America; and concludes, I should do every thing in my power, to rectify the opinion of Dr. Waterhouse on this important subject; well knowing, that his opinion would be looked up to, as a guiding star, for the direction of others, throughout the United States.

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### *The London Testimonial.*

The following is the form of the London Testimonial in favour of vaccination, which I long ago submitted to many physicians and surgeons of this metropolis for their signatures. Their compliance has been so general, that I think it unnecessary to specify their names; most of which have been already published in my Treatise on the Cow-pox. Among those added since, are the signatures of Dr. Reynolds and Dr. Ash.

“ Many unfounded reports having been circulated, which have a tendency to prejudice the public against the inoculation of the cow-pock; we, the undersigned physicians and surgeons, think it our duty to declare our opinion, that those persons who have had the cow-pock, are perfectly secure from the future infection of the small-pox.”

The following letter from Dr. Jenner, dated June 18th, 1803, proves that this testimonial was not published in vain.

“ The following intelligence, which has just been communicated to me by a gentleman, who quitted the province of Bengal about two years ago, I am certain you will receive with pleasure. You must well recollect the testimonial, to which, in the year 1800, you obtained the signatures of so many respectable medical gentlemen of the metropolis;



tropolis; and which was inserted in the periodical publications of the day.

“ This testimonial found its way to Bengal; and thus an immediate stop was put to all controversy respecting the validity of the arguments in favour of vaccine inoculation; for the inhabitants, from that time, ardently sought for those means of inoculating their families, which they at length so happily possess.”

The following extract of a letter from Dr. Meir, of the Medical Board at Madras, dated January 4th, 1803, will shew in what estimation Dr. Jenner's discovery is held there:

“ Every European child has been inoculated for the cow-pock; and has had the affection in the mildest and most genuine form. They are all improved in their constitutions, in consequence of that operation. The practice is now rapidly diffusing itself among the natives. It may be considered as the gift of Heaven.”

Much experience in the vineyard of vaccination, and much intercourse with all ranks of people, has long ago convinced me, that were the same exertions made by the ruling powers, and other persons of weight and influence in Europe, as were made in India, the small-pox would be exterminated from this quarter of the world in less than three months.

*Testimonials in favour of Vaccine Inoculation, from Edinburgh.*

Mr. Griffin, whose plan of inoculating gratuitously in Mr. Goldson's neighbourhood, I have already mentioned, is just returned from Edinburgh, and has brought back some very valuable testimonies in favour of vaccination; particularly one from Dr. Farquharson, the physician, and Messrs. Bryce and Gillespie, the surgeons of the Vaccine Institution of that city.

From their statement it appears, that “ vaccination began to be practised at Edinburgh in the year 1799, and became general the following year.

“ It was first practised at the Public Dispensary in Feb. 1801; and more than three thousand persons have now been vaccinated there. The medical gentlemen of that institution, and the other practitioners at Edinburgh, have also vaccinated a considerable number of patients in their private practice. They have all heartily concurred in their endeavours to convince the lower ranks of the propriety of  
having

having their children vaccinated; and they have succeeded much beyond their expectations."

I trust a time will come, when the medical practitioners of other great towns will also heartily unite in their exertions. Whenever that happy moment arrives, I venture to predict, that they also will succeed *much beyond their expectations*.

Impressed with this sentiment, I have endeavoured to convince others, that "the prejudices of the public are not insurmountable;" and that nothing is wanting towards their extinction, but a general co-operation of the more enlightened part of the community, and especially of medical men.

The manner in which the establishment of the Vaccine Institution at Edinburgh was announced, in a periodical publication, was not such as to portend a very zealous co-operation in that quarter. It is, therefore, with sincere pleasure we learn, that this celebrated university, where medical science has fixed her seat, has acted a part worthy of herself on this occasion; and strenuously endeavoured to promote vaccination, which is the greatest improvement of the healing art.

The authors of the Testimonial proceed to state, that there is no town in Great Britain, where the medical practitioners have been more assiduous, or more successful in their labours. They have met with no facts to render it doubtful, whether vaccination is a permanent preventive of the small-pox; nor have they heard of any such facts occurring in that city or neighbourhood.

They know many children, vaccinated more than three years ago, who have of late been repeatedly exposed to the infection of the small-pox; among others, some of their own children, who were vaccinated five years ago, without having suffered by that exposure. They hear daily of such instances from the mothers of the children who were vaccinated at the Dispensary, early in the year 1801. They also observe, that the small-pox has been so frequent in Edinburgh, for some months past, that many instances of the kind must have occurred, had not the preventive been permanent.

They think it must be the opinion, not only of the medical gentlemen of Edinburgh, but of every thinking man, that if vaccination is a security against the small-pox for a year, it must be a security against it for life. The contrary idea appears to them very unphilosophical, and re-



pugnant to their ideas of physiology and pathology. They think Mr. Goldson's pamphlet founded on such false principles, that no part of it can do any harm, *except the title*; and that the title can do no harm, but with weak or unthinking people.

Such is the answer of the gentlemen, who preside over the principal vaccine institution in Scotland. They add, that, although they have answered the queries of Mr. Griffin, in their own names, they believe they have given him the sentiments of all the medical gentlemen of Edinburgh, and the neighbourhood.

They conclude with wishing Mr. Griffin success in his labours in the vineyard of humanity; and request that he will freely apply to them, if he thinks they can in any way assist him, in furthering the great work in which he is engaged.

Mr. Griffin also received from Dr. Gregory, and Dr. Monro, the most flattering assurances of the high esteem in which they hold vaccination; and, could he have protracted his stay at Edinburgh a few days longer, he has no doubt but he could have obtained the testimony of that great school of medicine, in favour of the practice.

Thus encouraged in his undertaking by the answer of the oracle he has consulted, and impelled by motives of the purest philanthropy, Mr. Griffin will certainly renew his offer of gratuitous inoculation, on his return to Portsea: but let his neighbours beware; for if they accept the offer, and defraud medical practitioners of their due, they will all be sure to have the small-pox.

From the very moment when Mr. Rowland Hill announced the probability of gratuitous inoculation in the neighbourhood of Portsmouth, vaccination has lost much of its credit in that quarter. The time was, when certain practitioners would ensure their vaccine patients for three years; but now they will not ensure them for half the time. So far have these gentlemen rescued the small-pox from the encroachment of vaccination:

Semotique prius tarda necessitas  
Leti corripuit gradum.

From all accounts I have received it appears, that vaccination has not hitherto been much practised in the neighbourhood



hood of Portsmouth. If, therefore, Mr. Goldson's opinion were well founded, a great proportion of those who were vaccinated must already have had the small-pox. This being so contrary to what has happened in other places, we cannot doubt but those persons were either imperfectly vaccinated, or not vaccinated at all.

Could the small-pox so easily occur after the cow-pock, it would not be possible to exterminate the disorder from a single town; but, according to the latest advices received from Geneva and Vienna, that scourge of the human race had, for a considerable time, been totally eradicated from those large and populous cities, by the aid of vaccination. If this country is not roused from her lethargy, the last part of the world where the small-pox lingers, will be Great Britain.

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*Proofs that Vaccine Inoculation is a permanent Security against the Small-pox.*

A considerable number of persons who have been vaccinated four years, and others who have been vaccinated five years and upwards, have hitherto resisted, and still continue to resist, the infection of the small-pox in this metropolis, and other parts of the kingdom. I shall, however, adduce evidence of a nature still more convincing, in order to confound the enemies of vaccination, and to convince those who are open to conviction.

Three children of Mr. Henry Jenner, inoculated five years ago, have since been repeatedly inoculated with variolous matter, and exposed to the infection of the natural small-pox in its worst form, every year up to the present time, without catching the disease.

Pead, vaccinated by Dr. Jenner more than six years, and Phipps, his first patient, vaccinated by him more than eight years ago, have been frequently put to the same tests with impunity. In the spring of the present year, they were inoculated for the small-pox with matter in the most active state; but they resisted infection.

These patients were all vaccinated with matter from the human subject. Time, therefore, *has decided the question*, whether cow-pock matter degenerates in the human subject, and decided it against Mr. Goldson.

Instances



Instances out of number might be adduced, if necessary, in support of this position. The cow-pox is transferred by the milkers, not only from one cow to another, but also from one farm to another; which could not be the case, if the matter lost its virtue after the first remove from the cow. One instance lately occurred, which furnishes an incontrovertible proof, that vaccine matter, whether generated in the cow or in the human subject, is the same. A woman lately applied to Dr. Jenner, who had the cow-pock when a child. She caught the disease by handling the rags which came off from her sister's fingers. Dr. Jenner inoculated her for the small-pox; but she resisted the infection.

I shall here insert two other cases; with which, as well as almost every thing else relative to the subject of vaccination, I have great reason to believe, both from the tenor of his pamphlet, and from intelligence I have received, Mr. Goldson and his friends are totally unacquainted. The first case, which was published by Dr. Barry, is as follows: A gardener, who lives with a gentleman of Dr. Barry's acquaintance, infected himself with the cow-pock, by rubbing himself against another person who had received the infection from the cow, from a conviction that it would preserve him against the small-pox. This happened several years ago. Since that time he has often voluntarily exposed himself to the infection of the small-pox, and even lain in the same bed with his children, when they were covered with it, but never caught the disease.

The other case was published by Mr. Creaser. It was communicated to him by Mr. White, of Lansdown Place, Bath. About twenty-three years ago, John Bright, a labouring man, whom Mr. White sometimes employs, lived at a farm. His fellow-servant, who had the cow-pox, communicated the distemper to him in a frolic, by means of a scratch on the hand. He has since been repeatedly inoculated for the small-pox. He has also had the disease in his family, and been exposed to it under its most malignant form, but still escaped infection.

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*Continuation of Remarks on Mr. Goldson's Postscript.*

In his Postscript, Mr. Goldson publishes another of his failures; another proof, that he meets with *fewer failures* than

than the rest of the world. It is no wonder the event of this case was the same as that of the second case; since the child was inoculated on the same day, and with the same matter.

The goodness of the matter is certainly one indispensable requisite in vaccination; but not the only one, as Mr. Goldson imagines. A little knowledge, and a little attention, are also necessary. In consequence of the very extraordinary opinion that the whole success depends on the matter, Dr. Jenner made some observations, in a letter which I lately received.

He exclaims, "Who told them that all the success depends on the goodness of the matter?—Who could be such a fool?—Were this the case, vaccination would be as safe, and as effectual in the hands of the most ignorant and inexperienced, as it is in the hands of practitioners of the greatest experience and judgment."

In another letter he says, "As vaccination spreads, these cases will multiply; and for this plain reason; few, who commence the practice, understand it sufficiently to ensure safety and success. Why will not the faculty take pains to let the people know, that thousands who were inoculated with variolous matter, and were supposed to have had the small-pox, have since caught the disease, and had it in good earnest?"

Mr. Goldson adds another instance of supposed failure, in his own practice. In this instance, however, it may reasonably be doubted, whether the patient had the small-pox; or the chicken-pox, which is often mistaken for the small-pox. Be that as it may, those who have been inoculated by Mr. Goldson, and have hitherto escaped the small-pox, may well tremble for their safety.

It would have been satisfactory to know, how many Mr. Goldson has inoculated with supposed vaccine matter, in order to ascertain what proportion of his patients have already had the small-pox. The number of those whom it has hitherto spared is not very great; and it is advisable, that they should all be vaccinated again; *but not with Portsmouth matter.*

He himself informs us, that, when one part of his pamphlet, relative to the origin of the cow-pox, was sent to the press, he was wholly ignorant that the subject of it had ever been noticed by any one since Dr. Jenner's publication. Hence it is evident, that he is almost a perfect stranger to every thing which has been published on vaccination, at



home and abroad. He observes, that every circumstance relative to this practice is *interesting*. It must, indeed, be a very lively *interest*, which can induce gentlemen to enter so much into a subject, of which they understand so little ;

And force them, as it were, in spite  
Of nature and their stars, to write.

Mr. Goldson's remarks on the origin of the cow-pox, are contained in a note at page 56. He is very sanguine in his expectation, that if morbid matter from a horse were inserted into the nipple of a mare, instead of the nipple of a cow, it would produce some *new* disease; which, he tells us, could not fail to be highly gratifying to the physiologist, while it might lead to some very important discoveries in pathology.

Such experiments might certainly enlarge the boundaries of pathology, which, alas ! are already too extensive ; and, as Mr. Goldson observes, they might produce a new species of small-pox ; or, perhaps, they might produce a new species of plague. I trust, however, my countrymen in general will rather strive to enlarge the boundaries of therapeutics, and of prophylactics, than of pathology. They will thank Heaven that Mr. Goldson has "neither leisure nor opportunity" to put the abominable experiments which he proposes to the test.

He thinks this might be done *with great ease* at the Veterinary College. But it will not be an easy matter to prevail on the present worthy Professor to have any share in such detestable practices. He would scorn to have a hand in generating such a disease, as much as the physicians of the Small-pox and Foundling Hospitals would disdain to propagate the pest among the distressed objects under their care, as Mr. Goldson proposes.

Having already received the antidote of the small-pox from that source, where nature first pointed it out, let us not venture on any rash and unnecessary experiments. Let us have no farther concern with morbid matter from a horse ; *equo ne credite, Teucri* ; but if any such experiments are to be made, let them be made on those who propose them.

—Nam lex non equior ulla est,  
Quàm necis artifices arte perire suâ.

Mr.

Mr. Goldson thinks, that the mild small-pox which appeared in Gloucestershire some years ago, and attracted the attention of the faculty so much, might have originated from this source. Be that as it may, he seems extremely desirous of opening the box of Pandora once more, in order to see what treasures it contains.

How far Mr. Goldson's expectation will prove to be well founded, and how far new diseases can be generated, time must decide. But should his plan be crowned with success, and should it be possible to reproduce the small-pox when extinct; though he may not obtain a *parliamentary* reward for his services, yet *the faculty* will, no doubt, shew their gratitude, and settle a pension upon him and his heirs for ever.

Mr. Goldson is not satisfied with the prospect of generating new diseases; he also proposes, that the matter of one of the old diseases should be inserted in a new manner. For instance, he proposes, that if, upon investigation, the present mode of inserting vaccine matter should be found uncertain, we should imitate nature, and insert it into the hands or fingers.

He thinks *the feelings of humanity* require, that this mode should be adopted, rather than a discovery so replete with beneficial consequences to society as vaccination, should be relinquished. It is well known, that when infection is received this way, the disease is often very painful. Mr. Goldson, indeed, advises that remedies should be applied for moderating the inflammation; but still the complaint would frequently be more severe, from the irritability of the parts affected, than from the inoculated small-pox.

He says, his opinion that this method would probably ensure success, might be corroborated by referring to the *known* absorption that takes place, on immersing the extremities of *debilitated* persons in any fluid. By this it appears, he does not know, that the arm where the matter used to be inserted, is a part of the extremity; nor that absorption takes place in any part but the extremities; nor that it takes place even in the extremities of any but debilitated persons.

He says, "Instead of encouraging the reveries of individuals, who call for the interference of Parliament to suppress variolous inoculation altogether; the Vaccine Institution," by which he probably means the Royal Jennerian Society, "would be rendering the most essential service to the country,

were



were *they* to petition *them* to lend, once more, their fostering hand; so that the profession might be better enabled to procure matter immediately from the cow. This would be soliciting them to exert a power truly consistent with their constitutional prerogative, and suited to the temperate wisdom of their deliberations, as a legislative body."

It is certainly as much an infringement of liberty, to prevent a man from labouring in his vocation, and spreading a pestilential disease; as it is to prevent him from scattering fire-brands. It is also an infringement of liberty to prevent a parent from having the absolute disposal of his own child; whether he thinks proper to fatten him for the table, as Tantalus did before him, or reserves him for a worse fate, and suffers him to fall a victim to that cruel distemper the small-pox. But it was observed, and justly observed, by Mr. Wilberforce, at the general meeting of the friends of vaccination, when the Royal Jennerian Society was formed, that "the liberty of individuals is infringed by Parliament, in ten thousand instances, for the sake of promoting the interest of the community at large." It is an infringement of liberty to make a vessel perform quarantine; but it is only an infringement of *natural* liberty, which every man, who enters into civil society, must submit to resign.

Instead, however, of encouraging reveries of this sort, Mr. Goldson indulges himself in one of another kind. He fancies the omnipotence of Parliament is at an end; and that the Legislature, in its wisdom, has nothing to do, but to stretch forth its fostering hand, *in order to supply medical practitioners with matter immediately from the cow.*

Mr. Goldson justly remarks, that religious prejudices have been a considerable obstacle to the inoculation of the small-pox; but he commits a great mistake, when he imagines that this obstacle would be totally removed, if a *certain* mode of security were discovered. In this metropolis, at least, I frequently meet with parents, who solemnly declare, that they would rather lose their children by the natural small-pox, than save them by inoculation.

He justly remarks, that the prejudices of the public would readily subside, were they not fostered by those of the profession; but he labours hard to confirm the prejudices both of the profession and of the public, against the only practicable mode of diffusing the blessings of vaccination, and exterminating the small-pox. His efforts, it is probable,  
may

may for a while be too successful ; at least, with “ *the weak and unthinking part* ” of mankind, who are a very numerous family, and constitute the bulk of society in all parts of the world.

For he a rope of sand can twist,  
As tough as learned Sorbonist;  
And weave fine cobwebs, fit for skull  
That's empty when the moon is full;  
Such as take lodgings in a head  
That's to be let unfurnished.

Bold assertions in a title-page, artful insinuations in a preface, and fine-spun theories in the body of a work, may for a while amuse the multitude ; but it is the evidence of facts, and the decision of the learned and judicious few, that must eventually triumph ; and ultimately fix the wavering opinion of the public.

POSTSCRIPT.



## POSTSCRIPT.

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THE following case, related by Mr. Hickes, in his observations on a late publication of Dr. Pearson, tends to confirm an opinion expressed in the preceding work, that the small-pox occurs as often after variolous, as after vaccine inoculation. It took place three years ago, at a farm-house at Arlingham, in the county of Gloucester. A boy had been inoculated with variolous matter, and had been covered with eruptions. About a year afterwards, some of the family having the small-pox, he caught the disease again, and had a very heavy burden.

The Medical Journal for this month contains an analysis of Mr. Goldson's pamphlet. The author of this article endeavours to exculpate the medical gentlemen of Portsmouth from the charge of indifference to professional improvement; an attempt in which he might have been more successful, had he not reminded us, almost in the same breath, of their proximity to the metropolis, of the ready communication they enjoy with the head quarters of medical science; and that, even at last, vaccination was introduced into their neighbourhood *by compulsion*.

This gentleman asserts, that the original source of the Portsmouth matter appears unexceptionable. But no one who knows the latitude some people have allowed themselves in taking matter, and the number of instances in which pustules excited by such matter, have failed to prevent the small-pox, will assent to this proposition.

The author of the analysis asserts, that Mr. Goldson has dedicated his pamphlet to the Vaccine Pock Institution; but Mr. Goldson contradicts him in the same Journal; and tells us, he has dedicated it to the Directors of the Vaccine Institution.

tution in Salisbury Square. This, however, is a point which, in all probability, will never give rise to much contention.

The article in question is one of the many in modern times, which make us regret, that the review of books is a trade; that it is too often delegated to persons incompetent to the task, too often prostituted to the purposes of party, and too often made subservient to sordid gain. Such a practice cannot be reprobated too severely. On so important an occasion as this, no understrapper should be employed; no partial statement should be admitted; no puff, no misrepresentation, no compliment at the expense of truth, should be suffered to pass without animadversion.

The author of the analysis admits Mr. Goldson's statement of the Portsmouth cases rather too readily; but he does not admit his plea, for the reluctance with which Mr. Goldson and his friends adopted the greatest improvement of the healing art. He justly observes, that many medical men, in no respect inferior to the Portsmouth practitioners, either in sound judgment or prudent caution, had not hesitated to adopt vaccination, without any advantages but what the Portsmouth practitioners enjoyed.

This author tells us, "It should be borne in mind, that in many constitutions, the security produced even by previous small-pox, however severe, is only *comparative*, and does not prevent the subsequent accession of *fever*, and the *maturation of small-pox* pustules, after exposure to powerful infection.

This author compliments Mr. Goldson on the propriety of his dedicating his pamphlet to the Vaccine Pock Institution. This, it has already been observed, is a mistake. It is also a mistake to suppose, that this institution has any peculiar advantage with respect to duration. The Inoculation Hospital claims a priority in this respect; and Dr. Woodville and Mr. Wachsel, the physician and surgeon of that institution, are members of the Royal Jennerian Society.

But it is puerile to pretend, that a medical man is the more competent to put his cow-pock patients to the test, in consequence of his belonging to a society. Any individual is fully qualified for that undertaking; and it is easy to collect witnesses of his proceedings in any town or village in the kingdom. There are several *individuals*, members of the Royal Jennerian Society, besides Dr. Jenner himself, whose  
practice



practice has been far more considerable than that of the Vaccine Pock Institution, both in extent and duration. It is therefore an insult to deny, that they have it as much in their power to institute further experiments on the subject; as it is a mockery to affirm, that no party is so fit to decide the point, as that which furnished the matter, and of course is interested in the question.

It is rather unfortunate for Mr. Goldson's argument, that he did not put some of his early patients to the test of variolous inoculation, soon after they were vaccinated. Had he done this, he would have maintained the doctrine of a temporary preservative with a better grace. We should then have been able to ascertain much better, how far his patients were capable of resisting the infection of the small-pox, at any period. As to vague and general assertions, concerning exposure to the natural infection, those who understand the subject, will pay but little attention to them. The memorable case of the nightcap is an exception; but ridiculous if brought forward to substantiate the point in question, since there is no old woman who has not known a multitude of similar escapes, without the aid of vaccination.

There is one circumstance which has given rise to a number of erroneous conclusions, and brought considerable discredit upon vaccination. This is the similarity of the chicken-pox to the small-pox; which has occasioned it to be mistaken for that disease, in many instances, by the first physicians in Europe. It has often deceived practitioners, even after successive inoculations; and their unhappy patients have been left to discover the fatal error. How far this complaint has been mistaken for the small-pox at Portsmouth, I cannot pretend to determine; but in the metropolis, it is easy to produce cases in abundance.

Mr. Goldson plumes himself upon being the first, who has publicly brought forward cases, to shew the want of permanent security in vaccination. This is to be attributed, partly to his ill success, and partly to the provocation he has met with. Such is the fate of vaccination, that when a single spark of enmity to the practice lurks in the mind of a medical man; nothing is necessary but gratuitous inoculation in his neighbourhood, to blow it into a flame.

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